

FIG. 1A

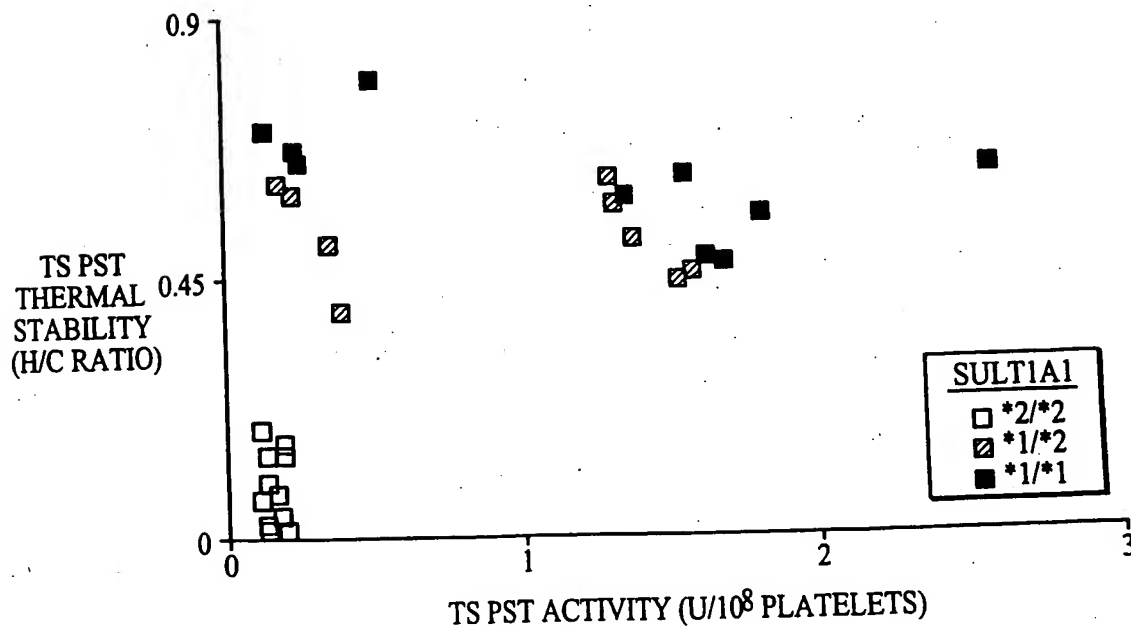


FIG. 1B

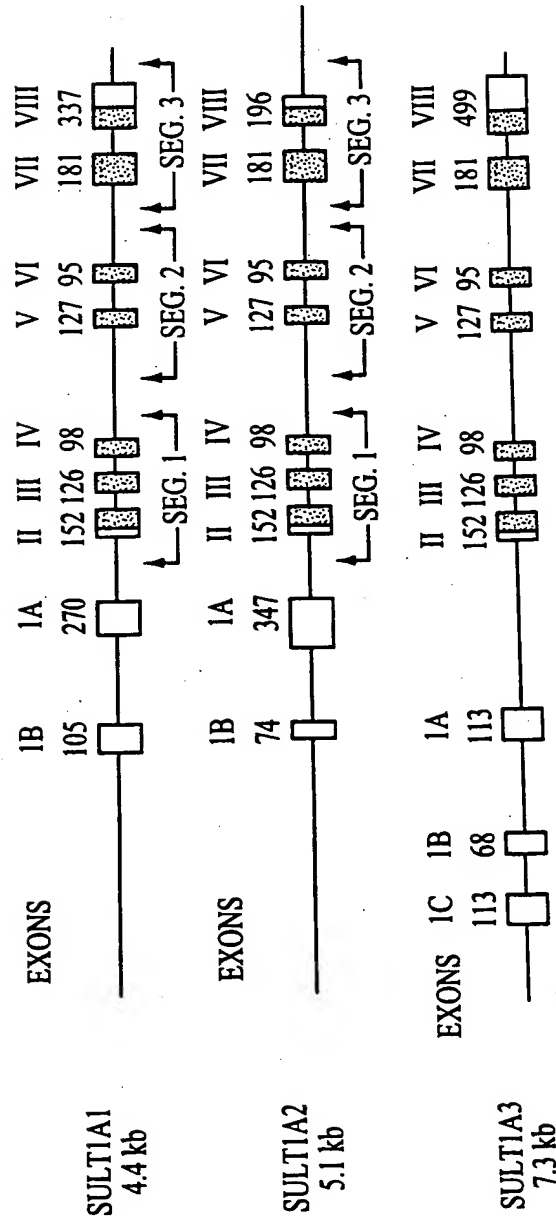


FIG. 2

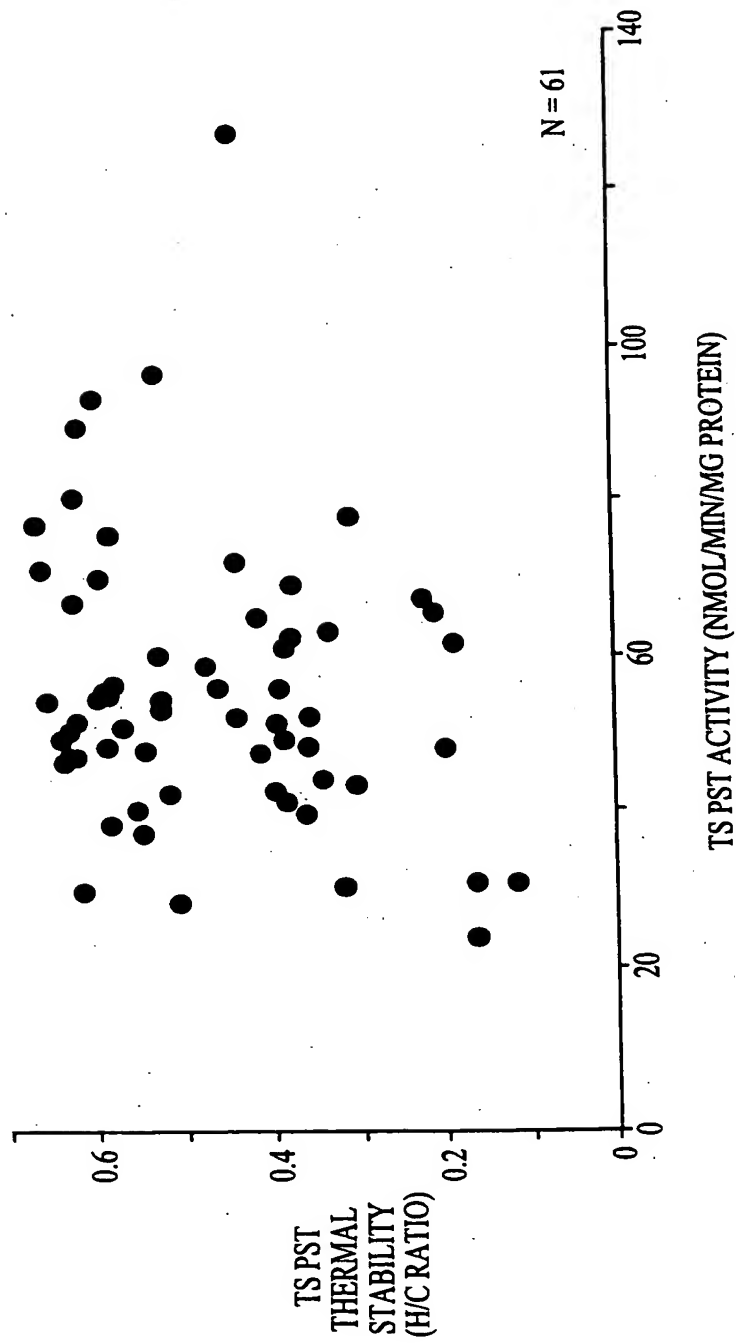


FIG. 3

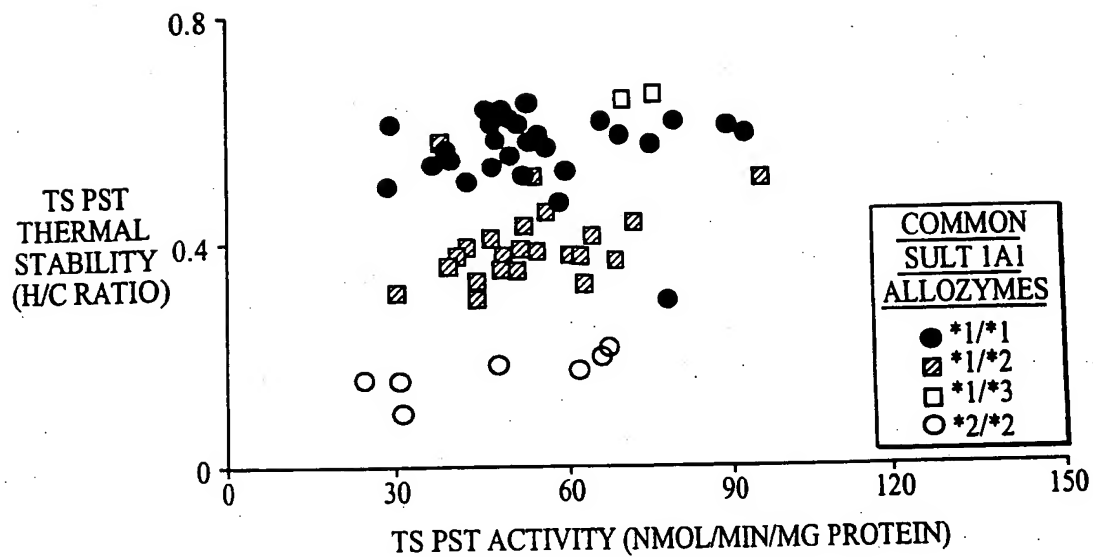


FIG. 4A

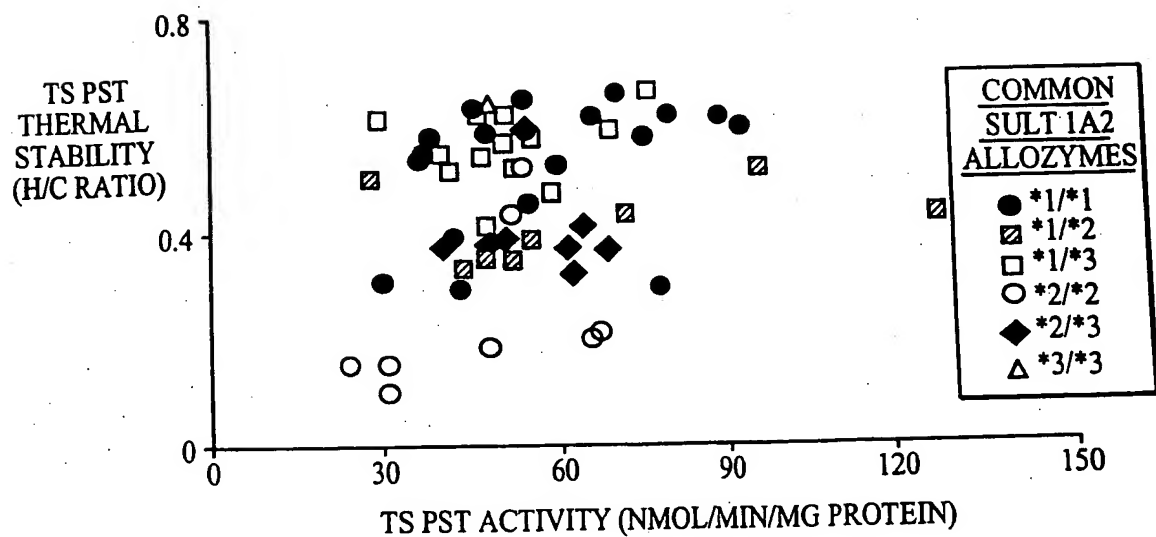


FIG. 4B

101 ttgtgacag ctgctctcc ctctgtct ctacatgct tggctgctg gaagagatga agggggggcc ttgtgtgccc caacccctgg ctgttggtta
 201 agagcccaag tgatctgct tgagagggag ttctctccgg aagaacagg ggaattctg cccttagagg gcaatgccc tagctgagtg cagtcocccc
 301 gcccagcct ggtccagctt tgggaagagg gggccaggtt gtcgaatcca ggcgggggga gccgtgctct gacttggtta ttoagggctg agctggagg
 401 gacgggggga aatagtgga gactgggaat tagaagaagt gactgggctt tggcccagc ctccctacc gtcactgctt ggttgacot cgtggaacca
 501 cctcgcttct gaggcacac tggatagccc tggctggagt cagtgcctt aatccctcc agatctggt ggcctagggt ggcctagggt aatgggctga
 601 gacatagacc tggcccgctt tccagcttct ttttggctt ttttttttt ttgagacaga gtttaactot gttgcccag gttgcccag aggttgact
 701 tcttggtcca cggaaacctc cgcctctgg gttcaagga ttctctgccc ttactctcc ttactctcc ttactctcc ttactctcc ttactctcc
 801 aatttttat ttttagtga gacaaggttt ctcatgttg gtoaggttg totaactcc cagcttccag gttgatctgg ttactctcc ttactctcc
 901 ctgggattac agagtgagc caccgtgcca ttactctcc ggcctctcc agctctctg gtoactgga gactgctcc ttactctcc ttactctcc
 1001 ggaatttcc tgcagagtaa agggatctac ttactctcc ttactctcc ttactctcc ttactctcc ttactctcc ttactctcc ttactctcc
 1101 gggcttctc aactaaagag ggttatatto atgagagtc caggaaagg taagcttctg atcatcaat ttactctcc ttactctcc ttactctcc
 1201 ttcttgagc cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga
 1301 tgtgtctggt tggctggtg cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga cgtcttgga
 1401 atgtgaact gctgctggg aagctctag tcaagggaao ctctgaggg ttgtgaggg caggggtgga gctagtagc ttactctcc ttactctcc
 1501 ttgttaactag agtgaatac aagctctag tcaagggaao ctctgaggg ttgtgaggg caggggtgga gctagtagc ttactctcc ttactctcc
 1601 ggaattctca tgggaacaga gggggagga ggggtccatg ggcctagat ttactctcc ttactctcc ttactctcc ttactctcc ttactctcc
 1701 actccacot gtcgcttgo ctctgaato aagctctag tcaagggaao ctctgaggg ttgtgaggg caggggtgga gctagtagc ttactctcc ttactctcc
 1801 tgaacttga otttaagtg agataaga acgagagga agcatttct tggaggttct gggagattca ttactctcc ttactctcc ttactctcc
 1901 ottgtctg gactctct actccaggg aatgggact gactgctct tggaggttct gggagattca ttactctcc ttactctcc ttactctcc
 2001 gaggcaatga gctgggctg actccaggg actccaggg aatgggact gactgctct tggaggttct gggagattca ttactctcc ttactctcc
 2101 actctgcca cacatccc totagactg ccttggtgto agagcttga gttgagggg ttactctcc ttactctcc ttactctcc ttactctcc
 2201 cactctcaag actggcctg agcagagag taggtgact ttccagggc ttactctcc ttactctcc ttactctcc ttactctcc
 2301 attagagaga gttgtctgt tgggtgctg ggggtgga gttcagggg gttcagggg ttactctcc ttactctcc ttactctcc
 2401 cagaaaaaa aactacaaa aactacaaa aactacaaa aactacaaa aactacaaa aactacaaa aactacaaa aactacaaa aactacaaa
 2501 ttaaggttg totcagctg gaaactaag ggggtatg gaaactaag aactacaaa aactacaaa aactacaaa aactacaaa aactacaaa

FIG. 5A

EXON IB

2601 caggctccag atccctccca oagtgga **CTT** AGGAACCTT CAGCTCAGAG ACAACCTG CATTCGCCAC ACAGACCCA CAATCAGCCA CTGGGGCGA
2701 **GGAGGGCAG** AGGCAGGT CCAAGAGCT CAGTgagtg acaagtgga agggpccag gggccctccg cctgtccag ttgtggtct asaattoasg
2801 aagctgagc cctgggac cctgcccctt ccaatgagtt atccattc agcaaacct ggcctggtg satccctcc ccttcccttg ttgtttgtt
2901 tttttcccg ggggagggca ggtcttgctg tccaccagg tggagtgtg tgggtactcg gcaactgag ccttgaaatc ttgggtccaa gtgattctct
3001 tggcacagc totggagtag atagactac aggcctccat cactccgct ggttaattt taagaattt tttaaaagt tttagagtg ggtcttgaa
3101 atgtgcaac aggttggtct ccaactcctg ggcctccgct ccttaggtc tgggtattata ggtggggagc accctccca ggcctgctt ggtctgagt
3201 caatcaggt ttgttcatc coacagcagc totgcccct agtgcagct cagtctccca atggggagtg ttgtccctg agcccagtg gactgtgpp
3301 agcaagtg atccagcc tgggtggtct **GGGCTTTC** CACATGTAG GGGCTGAGG GGTCAAGGAG GGGGACATCT CCACTGGGTG GAGGCTGGGG
3401 **GTCCAGCAG** GAATGGTGA GACAAAGGC GTGGCTGGC AGGAGAGAG CATAGAGCT TCCTCAGTGC AGCTGGACTC TCCTGGAGAC
3501 **CTTCACAC** CCTGATATCT GGGCTTGGC GAGAGAGGT GCTTCACAG CACAGAGGC TGGCCACAGC CCGTGGGATT TGAACAGCTC GCGAGGTGA

EXON IA

3601 TGAAGTga ggcagggctg gggaaacccg gaattagag ccagctggt ttccagccc agcccggaa ctgactggt ttgtgagtg gggcaagtea
3701 otagcctcc ctaggctcc glgaottccc tgaagpccag aattccact totgtgtt gttgtgtg taagggagc ggcctggtc tggpccctga
3801 **GGAGGACA** TGGAGCTGAT CCAGGACACC TCCGCGCCGC CACTGGAGTA CGTGAAGGGG GTCCGCTCA TCAAGTACTT TGCAGAGCA CTGGGGCCCC

EXON II

3901 **TCAGAGCTT** CCAGGCCCGG CCTGATGACC TGCTATCAG CACCTACCCC AAGTCCGta agtgaggag gcaacccccc ctctccagc tggpactccc
4001 Q S F Q A R P D L L L I S T Y P K S G
cacttgccc agcaggtcg tgcctcagc ctgctcacc cccatctccc tccctccca

EXON III

4101 **AGGTGGTGA** CCTGGAGAAG TGTCACCSAG CTCCTATCTT CATGCGGGTG CCCTTCCTTG AGTCAAAGC CCCAGGGATT CCTCAGTg tgtgagtg
4201 G D L E K C H R A P I F M R Y P F L E F K A P G I P S G
tctgtgtg aagggagtg gaggaagca ggggtgggg ttoagctcc agaacctcc ctgacccat gttccag **GGAT** GGAGACTCTG AAAGACACAC

EXON IV

4301 **CGGCCCCAG** ACTCTGAAG ACACACCTGC CCTGCTCT GCTCCCCAG ACTCTGTGG ATCAGAGGT CAAGTgagc agggpccag tgttccacat
4401 A P R L L K T H L P L A L L P Q T L L D Q K Y K
ccataatcc agcatttg gagggtgagc agggagatc aactggtt gggagtgtga gggpccctg agaacatag aagaaccttg totactata
4501 aaatacaga ttagecgggt gtggtgggg gtgcctgtaa tccagctac tccgagcct gacagaggag aatccctga accggggga aggaggtgt
4601 ggtgagccag agatccacc attgactcc agcctgga acaagagcaa acatccaaa aataataaa taatagata tataataaa aataaaatg
4701 tggpccctgt ggtggtccac tctgtgtag ccagcacttt gggagggcaa attgggtgga tcaactgagc taaggagta cagaccagc cgggaacat
4801 ggggaacttc catctata aaaaatgaa atataagag ggcctggtg caacctggg cgaagaaa taactccag taactgaaag totgaggtg gaggattgt
4901 tgagcctggg aggtcaaggt tgcagtggt atataact tattactc ccaatgagc ccaactaa aagaagaa aaaggtccag gttgtgggga
5001 gagaattgt caataataa ataaatgat aataaaat aataaagt aataaato coacttaa aagaagaa ttccctcag attgtccat ctctgggg
5101 tgtgaatcca gggagaggag ootggpcca ggcaggtt ggtcctgtc ttctggaaa gtgcctcag agaaagtag aggggtgggt otaacagcc cacaatatt
5201 ggggaactga tgcctcttgc totgatgaa aggaactga ttagactga agaatgga tctgtgga tctgtgga tctgtgga tctgtgga
5301 ggtgggggtg ggaacagc tgggtggag tgggtggtg ctacccgtg ctagagat caaacaaagto agpctccag otaacaggtc
5401 gaccaggcag gactttggt totgagcag gttcagatc tgcctggcc ctacccgtg ctagagat caaacaaagto agpctccag otaacaggtc

FIG. 5B

5501	otootttgoc aatocaaag atagatggp otggggpagg atgtgtgtgg ggttggtot totgocotg cag	EXON V
5601	CAACGCAAG GATGTGGCAG TTTCCTACTA CCACCTTCTAC CACATGGCCA AGGTGCACCC TGAGCCTGGG ACCTGGGACA GCTTCCTGGA GAAGTTCATG	
5701	N A K D V A V S Y Y H F Y H M A K V H P E P G T W D S F L E K F H GTCGGAGAAG gtgggtttga tgggaggag gaaagtgtgg agcggagggg tgggtgtac aacgacagp aacootgtgt tggacocoot tgotgtcttc	
5801	W G E Y TACGGATCCT GGTACCAGCA CGTGCAGGAG TGGTGGGAGC TGAGCCGAC CCACGCTGTT CTCTACTCT TCTATGAGA CATGAAGGAG	EXON VI
5901	S Y G S W Y Q H V Q E W W E L S R T H P V L Y L F Y E D M K E gtgagocac atgtgaagt tootocattg tgacacotgg gggdggao atcacagga cocacaggg toacacgac coctcocttg gcagococaa	
6001	cagagggpoo ggtttoccaa tootgootto ttgucpagg octococgt acagggcboa cotggpagg ggcocacaa ggcototoato accacacat	
6101	gagtcagctg catggggggc cagggatcag aacttagtc ctattgtac toctgtcaa aggggtggcc acccagggcc acgtcatg aagagacca	
6201	tcaogtoot caococaggg agocagpoc agtcatgat gggatocag ggcagacago atttotttt accocggga otggggpoot ggggtgtgag	
6301	gagttggctc tgcagggtot ctaggaggg tggccagat gctctgagg ttgagaggg ggcacocctt tacttttct gaacagpaa tccgggcctc	EXON VII
6401	caotgagtag cccototgtg ctcagacc CAAGGGAG ATTCAAGAG TCTGGAGTT TGTGGGAC CCCTGGCAG AGGAGACCTT GGACTTCATG	
6501	N P K R E I Q K I L E F V G H S L P E E T V D F H GTTCCAGACA COTCGTTCAA GGAGATGAAG AAGAACCTTA TGACCAACTA CACCACGTC CCCAGGAGT TCATGGACCA CAGCATCTCC CCCTTCATGA	
6601	V Q H T S F K E M K K N P M T N Y T T V P Q E F M D H S I S P F M R GGAAGgtgg gtgtggpaa gtaoggggggt ttgggggggg tgggagpago agotgagoo toocacatgg caotggggp otocootggg atgagactoc	EXON VIII
6701	K G agccttgctc cctgcttcc ccccccag SC ATGGCTGGGG ACTGGAAGAC CACCTTCACC GTGGCGCAGA ATGAGCGCTT CGATGCGGAC TATGCGGAGA	
6801	AGATGGCAGG CTGCAGCCTC AGCTTCGCT CTGAGCTGTG AGAGGGGCTC CTGGGGTCA TGCAGAGGGA GTGTGCGAAT CAAACCTGAC CAAGCGGCTC	
6901	M A G C S L S F R S E L AAGAATAAA TATGAATTGA GGGCTGGGA CGGTAGGTCA TGTCTGTAAAT CCCAGCAAT TGGAGGCTGA GGTGGGAGGA TCATTGAGC CCAGGAGTTC	
7001	GAGACCAACC TGGGCAACAT AGTGAGATTC TGTTAATAAA ATAAATATAA TTTTJaaaa gacgataaaa tatgattgtg ggcagggcat	
7101	agtggpboat g 7152	

FIG. 5C

-3729 ctotccctoo ttgtctctta cctgcctgct gctggggaac ggtgaagcg gggpoottgt gttgccccaa cctggctgtg tggctaagag occacgtgat
 -3629 ctgcctgtga gaggagtcc ttccggaga aocggggcag ctctgpcoc tagaggpca atgcctago tgaagtgcagt ccccgccccc cagocctggtc
 -3529 cagcttctgg aagaggggtg coagtgtgc aatccagpcc gggagagcgg tgcctgato ttggtattoa gggctgagcc ttgtagatgoc
 -3429 tgaototgtc tototototg gcccctagcc ttggtagctg tagaggctca ctgcttggg tgaotgato tggctgtgat ggatgagcac gggggaaata
 -3329 gtagaagact cggatattga agactgagt gggcttggg cccagctcc ctacccact cctgtccctg tagggaggt cacaagao cagtgggaca tgcacctoag
 -3229 gacacotgga tagcctgct gtagctcagt gtccctaato cctccagat actggtggcc tagggaggt gcccagctg gactgcaatg gctgatat ttcttaccg
 -3129 cctgtttoca cgtttcttgt tgttttttt ttttttgga gacagattt cactcttgtt gcccagctg gactgcaatg gcccagctg gactgatat ttcttaccg
 -3029 aacototgpc tccgggttc aagcgattot cctgcctcag cctccagat agtgggatt acaggtgtg gcccagctg gactgcaatg gcccagctg gactgatat ttcttaccg
 -2929 agtagagaca aggtttctcc atgttggtca ggtggtoto aaactccga ctccaggtga tctgctgccc tggcctccc aaagtctgg gattacagga
 -2829 gtgagccaco gtgocagpcc ttctccagp tottgpcaco tttagoagaa acatattag gacaagtga aaagtctga acgttagcag atttctgca
 -2729 gactaaaggg aotaoctgaa gaagaggaac gtgggggtcc toagagagt gtctaatgcc ctacaaggtg tggggctgao ctttatggg ttcttcaact
 -2629 aaagaggggt atattcatga aggttccag aaaggttaa gatttotcaa gacgtgtgtg obacaattta cccccaaata caggtgttcc tggagcctgc
 -2529 ttgpcactgg tgggtgtacg gtttcatatg ttactgattg taactgaga tootaggtga aaactacato aaataoagc ocatgttgt totggttgt
 -2429 cpaagccagp ttggtcctoa tctatatttt caggactta ttggcccttg gaoatgag atatttcaag ttctcttctt ctggtcatgt gaaactgctg
 -2329 octgggattt totgttgtct tgotagcaot ctattaatct cactttctg ggtggagcta gtgocagctg ggtggagcta gacotgccc cctcagtttt oactagagt
 -2229 caatacaag totagctaa gaggccctcc tgaaggttgo tagggpccg ggtggagcta gtgocagctg gacotgccc cctcagtttt oactagagt
 -2129 caoagagggg gaggaggggt cctgtggccc tagagggga gacccctct ctctgctgg aaatcccatg cctcagtttt ccccgcttgo ctotgagctc
 -2029 acgcaacccct ggaagggtt gggagactca ccttactca gatgttgtt tacctgtctc gtgcccaggt tgacccctgga ctttaaatag tgaggacaaa
 -1929 gaacgagggg ggtgggggga tgaactcctt ccaagggggg ctgtggttca cagcctotaa cctcctotgg tototgtctg tggagcctcc ttcaaaccca
 -1829 tggaaagaaa agtaoctgpc aggggtgtgt gttcttctag gatottctat cgtgtgtctg taggttccc agggagcctat gactgtggg ctggctccca
 -1729 gggcaatggg aotgaggtgt ccttgttctt ttgtgttct atggtatcat gtctgtctc accctgccc ctccaotctg cccacaogca tcaotccaga
 -1629 ctggccttgt ggtcagagcc ttgagtgcat gggctgtgg aggcctgtgg gttgcaotgg gtcagagccc ctggpaccct caagctggtg ctggagcccag
 -1529 caggtaggtg aactttccag ggcctgccta tcccagcttt ctctccaat cctctcccto tottgctgg gtcattaga gaaagcttgt cttttggagt
 -1429 toaggggag gtoagggaco cagtgcagc ttggagagc tottgagat aggggggtaa tagagaagct cccccaacccc oaaocctaco
 -1329 aacccaaacc oagtcgtggc ttggagagc tottgagat aggggggtaa tagagaagct cccccaacccc oaaocctaco

FIG. 6A

EXON IB

-1229 cottocttco ggaaggaat otaagtcoag ccccggtcc agatccctcc caactgac taagaaccc toagacaga caacacocct GCATTCCCCA
 -1129 CACAACACC ACTGCAGCC ACTGCAGCC AGGAGGAC GAGGCCAGGT TCCCAAGAC TCAGTgagt gacacacgg aatggcccag gaococctoa
 -1029 ccctgtccag ctgtggtc caaatccaa gaagccgagv otctgttat ctctgtctc toccatgga taccatatt cagacacccc cggccggcct
 -929 gaatccocct cocttcoctt tttttttcc ggggaggaca ggtcttgbtg tsaoagggc tggagtgtcg tggatccctg gcaatggag ctttgatcc
 -829 ctgggtcaa gtgattctcc tgcotcagta gotaggacta cgaacccca ccatccctgc tggatagttt taaaaatat ttttaaga cttttagaga
 -729 tggggtotto caatgtgco cagattggtc tocaattot ggtotagoo tocttagggt ctgggattac agt-gggagc caccctggcc aggtatccctc
 -629 ttttgatgag tcatcacagt tttgtccatt cccaatccag gttotggcc ccaataccag ctatgttgt oaatgggtt TTTGTCTGG AACCCAGATG

EXON IA

-529 GACTGTGKC GGGCAAGTGG ATCAGAGGCC TGGCCAGCCT AGAGTTGCC ACATGTGAGG GGGCCAGGGG CTCAGAGAGG GGAACATCGG GGAGAGGAGC
 -429 CTAAGTGGTG GAGCTGGGG GTCCCAGCAG GAATGTGTA GACAAAGGCG GTGGCTGGC AGGAAGACAG CACAGGAAGG TCCTAGAGGT TCCTCAGTGC
 -329 AGCTGGACTC TCCTGGAGAC CTTACACAC CTTGACATCT GGGCCCCCTT CCACGAGGT GCTTCACTG GTCTGCACCA TGGCCAGGC CCTGGATTTC
 -229 TGAACABCTC CGCAGGTGAA TGAAGTga ggcacgggtg ggaacaccc acattagac ccgactggt tttccgccc agucggcca ctgactggcc
 -129 ttgtgagtgo ggggaagtoa otcaacccctc ctaggccctca gtacttccc tgaaggaag attccaott tcttgttctt gctatgtgtg taagggaacg
 -29 ggcctgggtc tggcccoctga cgcagGAACA TGGAGCTGAT CCAGGACATC TCTGCCCCGC CACTGGAGTA CBTGAGGGG GTCCCGCTCA TCAATACTT
 M E L I Q D I S R P P L E Y Y K G Y P L I K Y F
 ggtgaggagv gcaacacac

EXON II

EXON III

72 TGCAGAGGCA CTGGGCCCTT TGCAGAGCTT CCAGGCCCGG CCTGATGACC TGCTCATCAG CACTACCCC AGTCCGTA ggtgaggagv gcaacacac
 A E A L G P L Q S F Q A R P D D L L I S T Y P K S G
 172 ctctccacgg tggaggtccc caocttggcc agcgaggtca tgcctccctc agctgtca cctccatct coctccctct ccagGCACCA CCTGGGTGAG
 T T W V S

EXON IV

272 CCAGATTCTG GACATGATCT ACCAGGCGGG TGACCTGGA AAGTGTACG GAGCTCCCAT CTTCATGCG GTGCCCTTCC TTGAGTTCAA AGTCCAGGG
 Q I L D M I Y Q G D L E K C H R A P I F H R Y P F L E F K Y P G
 372 ATTCCCTCAG gtgtgtgtgt cctgggtgaa agggaggtgg aggaagacag ggtggggt toagctcacc agacttccc tgaocactg ctatggatg
 I P S G
 472 GAGACTCTGA AAAACACACC AGCCCCACGA CTCTGGAAGA CACAGCTGCC CCTGGCTCTG CTCCCCAGA CTCTGTGGA TCAGAAGTC AAGTgagac
 E T L K N T P A P R L L K T H L P L A L L P Q T L L D Q K Y K

FIG. 6B

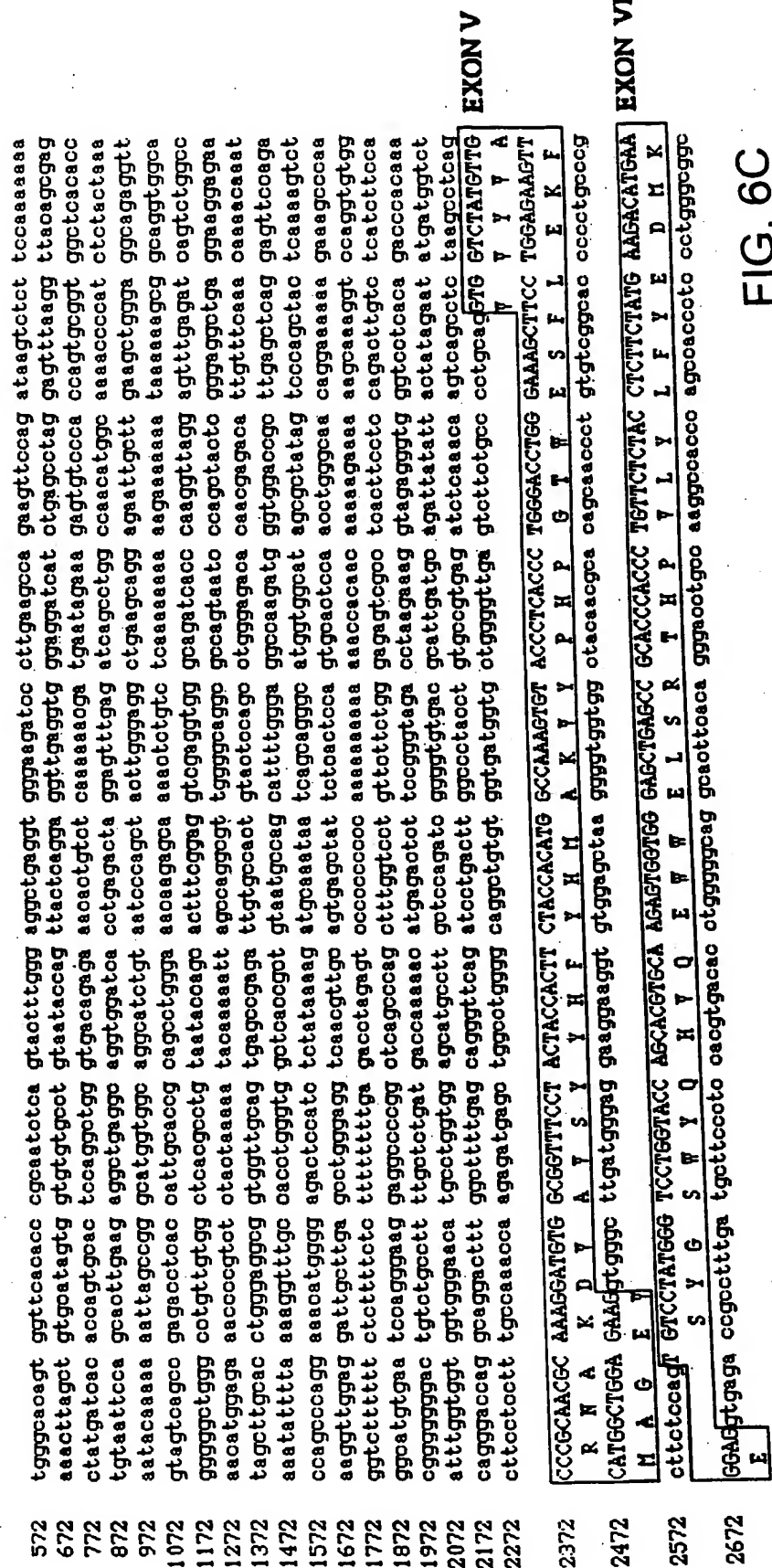


FIG. 6C

```

1  acctctgcct cctgggtcca agcaatcctc cttcctcacc ctccagagta gctgggatta
61  caccgcgcctg ccaccgcgcc tggcctaatt tttgtathtt tagtagagat ggggggtttcc
121 aaccatgttg gccaggctgg tctccaaact cctgacctca ggtgacctg cccacctaag
181 cctcccaaaa tgctgggtatt acaggcatga gccaccgtgc ccggcctaaa taattaataa
241 aataatggac gatgggtgcc ttctactgag cttccggtaa ttgtgagtga gtagaggact
301 tgccttgggg acattcagtg acctgctggg tgttgctgag ctgtgaggaa gttcaggctt
361 ggctgcagtg gtgaggctgt gactcaatca atcactgctg atgctcccag gacctgcacc
421 agcttagtcc taggggcaag gattttaact gtccacctca gtctcttcac ttgtaagatg
481 caaataacag tcacccttgc ctcatgggat ggagctgtgt aatgcccgcg acagtgcctg
541 ctgcatagag ggggtgctgc cagctgcctc tccctccttg tctcttaact gcctgctgcc
601 tgggtcagga tgaagacccg ccttctgtgt gccccaccc tggctgctg ctaaggggcc
661 atgtgatctg cctggcagag gagtttcttc aggaagaacc agggcagctt ctgcccctag
721 agggccaatg ccttctgtga gtgcagctcc ctggcccag cctgggtccac ctctgggaag
781 agggtgccca gttgtgcaat ccaggccag gcagctgagc cctcatctca gcatgcaggg
841 cggatactgg agggggcttg tggcatctga ctctgtatct cctacctgcc cctctccttg
901 gtagctgtga gaagtcactg ctttggggag acctgatctg gctgtgccag atggacactg
961 agaaagaagt agaagactca gaattagaag aggtgagtggt gcttgggtgg cgggctccct
1021 accccactcc ctgcccctggg ctgcccctgga ccacactgct tgccctctgca ggcacactgg
1081 acagacctgc tggagacctg atcctcagtg tccctacccc ctccctacctc ttttctgtgc
1141 cacctgctgt ggggtccagca ggtttttact tgagtacaat aaaaagtctg agtcaagggt
1201 gccttatggg ggatgctgag gggaggggag gagctagtag cccaaggctc tgccagtcac
1261 ggggcttccct caggggcaca gaggaggcag gaggggcccc tggccctagc acgtgaacag
1321 cttctactct gcctggaaac cccatgcctc agctttcccc tacttgctc tgagctcatg
1381 caattctctg aagcctggga gacttacctt gaaattgaat gcaaatagga caagaccaa
1441 ggaggatggg gggatgcccct ccttccacgg ggccctgtgg ctccaagtc ttaatctcct
1501 ctagtctctt gtctacggag cctccttcaa acccaggga agaaaagcac ctgccagggt
1561 tgttttctct ctaggatctt ctattgatgc tctgtgaggt ccccaggag ccatgaagct
1621 agggctgggt cctagggcaa tgggactaca gtgtccttgc cctttcttat tctttctgtt
1681 ctttctttct tctttttttt tttttttttt tttttttgag acagagtctc actctgttgc
1741 ccaggctgga gtgcagtggt gtgactctgg ctactgaaa cctccgctc ctgggttcaa
1801 gtgattctct tgccctcagc tctctagtag ctaggattac aggtgcccgc catcagccc
1861 agctaatttt tgatatttta gtagagacag ggtttcacca tgttgccag cttgggtctg
1921 aactcctgac ctgaggtgat cctgctgcat cgacctccca aagtaactggg attacaggcg
1981 tgagccacca cgctcagcct ctttcttgtt ctatatgtcc atgctctgct ccacttctgc
2041 cccttccactc tgccccacac atcactccag actggccttg tggctcagagc ctggaatgcc
2101 tgggctgctg ggggcccgtg gactgcactg ggccagaacc cctgcccct tcaagactgg
2161 cctgtagcca gcaggtaggt gacttttccc aggcgggctt atcccacct tccccccac
2221 tcactcacct cccttgctg ggtcaattag agaaagcttg tggccaggc atggtggctc
2281 atgcccgtaa tctcagcact ttgggaggcc gaggcgggag gatcatctga gctcaggagt
2341 ttgagaccag cctggccaac atggcaaaac cccgtctcta ctaaaaatac aaaaattaac
2401 cggatgtggt ggtgtgcacc tgtaatccca gctactcggg aggctgaggc agaagaatcg
2461 cttgaaccca ggagggggag gttacagtga gcggagatcg tgctactgca ttgcagcctg
2521 ggcgagagag cgagtctcca tctcacataa aaaaaagaaa aagaaagaaa gcaagcttgt
2581 ctgttggcct gccctgcagg gtggagtcca gagggaaggc caggagccta gtgacagctc
2641 aaaaaaaaaa aaacccaaat accaatgttg gccccttttg cctttcatte atgtgttttc
2701 tatacactaa actcacatat tgggttttga gatcactcca agcttggctg gagctgtggg
2761 ggtgaaggag gtaatagaga agcttcccca cctcaaccc cacccttcc tctctggagt
2821 tcccagccct gacttttagt ccttccfaca ctggaccttc aaaacctca gggcagagag
2881 cagccctaca ctccctacac cacaccata ctgagccctt gcaggcaagg agagaacagg
2941 tcaagttccc gagagctcag gtgagtgaca cgctggaatg gccagggga ccttaccct
3001 gctcagcttg tggctccaac attctagaag ccgaggcctc tgccatccct gccctttccc
3061 atggatattc catttcaatt agacaacca gcctggccgg aacccccctg cgctccctct
3121 tttccttctg gtatttttga gacagggtgt tgctccgtca cccaggctgg agtgtagtgg
3181 gatcctggcc cactgcagcc tcaaattcct aggctgaggc aatcctgccg cctcagcctc

```

FIG. 7A

3241 ctgagtagct ggggttacaa gagcaagcca ccacacccag ctaattttga aaaatatttl
 3301 ctgtagagga gaggtcttgc tttgttgctc aggttggtct caaactccag ggctcaaggg
 3361 atcccttccc gttggcctcc caaggctctg sgattacagg cgggagtcac cctgcctggj
 3421 cccctccttt tgatgagtc tcaagtttca tccccgcacg aggtcttagc ccttggtacc
 3481 agcttaggtg ctcaatgggc tgtgtttgtt ctggagccca gatggactgt ggccaggcaa
 3541 gtggatcaca gacctggccg gcctgggagg tttccacatg tgaggggcat gaggggggt
 3601 caaggagggg agcatcgccg agaggagcgc actgggtgga ggctgggggt cccagcagga
 3661 aatgggtgaga caaaggcgcc tggctggcag sgagacagca caggcaggcc ctgagcttc
 3721 ctgagcacag ctggactctc ctggagacct tcacacaccc tgatatctgg gccccgcgt
 3781 acgagggtgc tttacttggc ctgactatg cccaggccc tgggattttg aacagctctg
 3841 cagggtgactg aaagggtgcs ccaggctggg gaacgacctg gtttcagccc cagccccgc
 3901 actgactgac tttgtgagtg cgggcaagtc actcagctc cctaggcctc agtgacttc
 3961 ctgaaagcaa aaactctgca aaggggcagc tgggtgctgg ctacacactg taatccagc
 4021 actttgggag gctgaggtag acaaatcact tgaggccagg agtcttagac cagcctggg
 4081 aacatgggtga aacccccatct ctactaaaga aaaaaaaaaa ttagctgagc atggttgta
 4141 atgcttgtaa tcccagctac ttgggatgsc gaggcgggag gattgcttga acccaagagg
 4201 tggagtttgc agtgagctga gattgtgcca cactgcactc cagcttgggt gagagtgaga
 4261 cctcatctca aaaaaaaaaa aaaaaagaga gaatccactc tcttggctg tttgatggtg
 4321 gtaagggaac gggcctggct ctggcccttg atgcaggaac atggagctga tccaggacac
 4381 cccccgccg cactggagt acgtgaaggg ggtcccgtc atcaagtact ttgcagagtc
 4441 actggggccc ctgcagagct tccaagccc acctgatgac ctgctcatca acacctacce
 4501 caagtctggt aagtgaggag ggccacccac cctctcccag gcggcagtc cactctgtt
 4561 cagcaagggtc gtgcctcag cctgctcacc tctatctcc cctcctctcc acgacaccc
 4621 tgggtgagcc agatactgga catgactac cagggcggcg acctagagaa gtgtaaccgj
 4681 gctcccactc acgtacgggt gcccttctc gaggtcaatg atccagggga accctcagg
 4741 gcatggctgg gtcctggggg taagggaagt ggaggaagac agggctgggg ctccagctca
 4801 ccagaccttc cctgaccac tactcagggc tggagactct gaaagacaca ccgccccac
 4861 ggctcatcaa gtcacacctg cccctggctc tgctccctca gactctgttg gatcagaagg
 4921 tcaaggtgag gccgggtcga atggttcaca cctgctatcc cagtttgaga ctgaggagg
 4981 aggatccctt gaaggctgaga gatggagacc agcctgggca acattgctgt agagatgaca
 5041 tcccatctct acaaaaaataa aattaacaac ctggtatggt ggcataagct gttcccagtt
 5101 acttaggagg ctgagcgggg aggactgttt atgcaaatag gaagctgcaa tgagccctga
 5161 tgatctgct gctgcactcc agcctgggca acacagcaaa accatctcta cgaaaaaaaa
 5221 agttccact gactggcaag gaaagccagg aaggggggct cagggtgccct ctgagcatg
 5281 tacctgttct tctggaaggg cctcctcgct tctgccaggc tcatcacatc ttttttttt
 5341 ttgagacaga gtcttgctct gtcaccctgg ctggagtga gtggcatgat ctgagctcac
 5401 tgcaacctcc gcctccccag ttcaagtgt tctcctgcct cagcctcctg agtagctggg
 5461 attacagctc tctgctacca caccggcta atttttgtat tcttttagt agagacgggg
 5521 tttcaccatg ttggtcaagt ggaactcaaa ctcttgacct tgtgatctc ctgcctcgac
 5581 ctcacaaagt gctggaatta caggcgtgag ccaccgcgc tggccctttt tttttttgag
 5641 acagtctcac tctgttgcc gaggttagag cgcaatcgt tgatctcggt tcaactgcaac
 5701 caccgcctcc tgggttcaag caattctcct gcttcagcct cccaaggagc tgggattaca
 5761 ggtacctgco accacgccc gctaattttg tatttttagt agagatgggg tttcaccatg
 5821 ttggtcaggc tgggtcttgaa ctctgacct cagggtgatct ggcaccttg cctcccaaag
 5881 tgccgggatt agaggcatga gccaccacgc ccagccttca tcacatcttg agagagaca
 5941 ctgtctgct cttgctctga tgagggtctg atgcaaaagga tagtgagtct ctacagtga
 6001 cacttaagaa aggcagcatg tgggtgctca caggtcaggc ggaggagggg gagctgggtg
 6061 ggaccaggca tgcttgctc cagatcagga tatgatggca ttggtgcaga ttatattagt
 6121 atagaatatg gtctcaggaa ccaggcagga ctttggtctc cgagcagggt tcagatccca
 6181 gcttgccct accgtgagc tgagatctca agcaagtcag cctctaagcc tcagggtcct
 6241 ccttgccag ttcaacagat gagctggcct ggggtgggct gtgtgggtgat ggtgctgggy
 6301 ctgggtctc tggcctgca ggtggtctat gttggccgaa acccaaggga cgtggcggtc
 6361 tctactacc atttccaccg tatggaaaag gcgcacctg agcctgggac ctgggacagc
 6421 ttcctggaaa agttcatggc tggagaaagt gggcttgact ggaggaagga ggtgtggaag
 6481 ccgaggggtg gtggctataa cgtacagcaa cctgtgtcg gtgccccctg cctgctctc
 6541 tagtctcta cgggtcctgg taccagcagc tgcaggagtg gtgggagctg agccgacccc
 6601 acctgtctct ctacctctc tatgaagaa tgaaggaggt gagaccgact gtgatgctc

FIG. 7B

```
6661 ccccccattgtg acacctgggg gcaggcacct cacagggacc caccaaggcc acccagcccc
6721 gtccctggggc ggctcccaca gcaagcccgg attcccccac ctacctccct ggcccaggcc
6781 ccccccactgc agccccacct ggcagcaggc tcggcacagc ttctatcttc tgcacctgag
6841 tcagctgcat ggggtggccac ggatcagata cttagtccta ttgcttatcc tcaccaaagj
6901 gtgtgccacc cagggccaca gtcatggaag aagaccatcc cggtcctcac ccataggcgc
6961 caagccctgt tcatgatggg atcacagggc agagatcaat tcattttact cca,tgacta
7021 gggccccagg ggttgaggct ctttgggggt tctaggggaa gtggccagat ccctctgag
7081 gttagagagg gggacccgtt ttgttttgct ccactgagga gccctctgct gctcag,aacc
7141 ccaaaaaggga gattcaaaag atcctggagt ttgtggggcg ctccctgccg gaggagacca
7201 tggacttcat gggtcagcac acgtcggtca aggagatgaa gaagaacct atgaccaact
7261 acaccaccgt cccccaggag ctcatggacc acagcatctc ccccttcatg aggaaacgtg
7321 ggtgctggcc agcacggggg ttggggcggt gtgggagcag cagctgcagc ctccccatag
7381 gcacttgggg cctccctggg gatgagactc cagctttgct ccctgccttc ctccccacg
7441 catggctggg gactggaaga ccaccttcac cgtggcgag aatgagcgt tcgatgcgga
7501 ctatgcggag aagatggcag gctgcagcct cagcttcgcg tctgagctgt gagaggggct
7561 cctggagtca ctgcagaggg agtgtgcgaa tctacctga ccaatgggct caagaataaa
7621 gtatgatttt tgagtcaggc acagtggctc atgtctgcaa tcccagcgat ttgggaggtt
7681 gagctggtag gatcacaata ggccacgaat ttgagaccag cctggtaaaa tagtgagacc
7741 tcatctctac aaagatgtaa aaaaattagc cacatgtgct ggcacttacc tgtagtccca
7801 gctacttggg aagcagaggc tggaggatca tttcagccca ggaggttgtg gatacagtga
7861 gttatgacat gcccattcac tacagcctgg atgacaagca agaccctccc tccaaagaaa
7921 ataaagctca attaaaatga aatatgattt gtgttcattg agagcctgta ttggaaagga
7981 agagaaactc tgagctgaaa gagtgaatgc ccggtggggc cacatatggt cacctctccc
8041 ccagccttca gctccccagg tcaccatata tggggagggg agaaggggtt ggagaagtaa
8101 aaccaggag atgtgtggag gggggatgtc tgtttaatcc cagcacatcc tctgctgtcc
8161 tgccccaaga tgggtggagga cgtcgagtcg gccgggcagc gtcacttttt cttgggctcc
8221 ttagaagcta ccaggtaacct ctgggccaca ctgagatgag gggagtagcc gcctgcatag
8281 gaggtgtctt caaacaggat agtatagtc ctcctggggg ttgtgggggt aggtggccaa
8341 ggaagggtag aggagcaagc ccccggggct ggttgtcaac tcactttgtt ggctggaatt
8401 ggttgtaact tgaccacctc gggcaggatc ccactgctca tcccaa
```

FIG. 7C